

UNIVERSAL DESIGN FOR LEARNING: BIG IDEAS AND COOL TOOLS FOR STUDENT ACHIEVEMENT

Universal Design for Learning: Big Ideas and Cool Tools for Student Achievement

Joy Smiley Zabala, Ed.D., ATP
Director of Technical Assistance
CAST and the National Center on Accessible Instructional Materials

In this session...



Big Ideas about UDL
What Was, What is, and What's to Come



Cool UDL Tools from CAST
Book Builder, Science Writer, UDL Editions and more



Practical Examples & Explanations
Video examples from Classrooms, Teachers and Researchers

Universal Design for Learning

What was...

A Transformative Tool



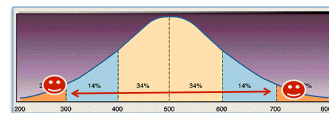
The Starting Point - 1985



CAST began by addressing the needs of students "in the margins", primarily with technology-based accommodations

From the Margins to the Whole

- From the context of creating responsive learning environments for students with disabilities
- To the focus on enhance learning opportunities for all students



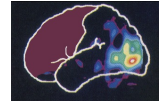
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A Pivotal Point

Accommodations created for a subset of the population typically provide benefits for everyone

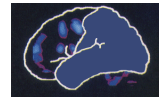


Roots in Neuroscience



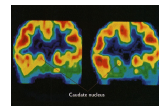
Recognition

Multiple representations of information



Strategic

Multiple options for expression

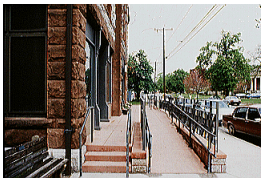


Affective

Multiple means of engagement

Roots in Architecture

A Universal Design approach is simply more practical, elegant and effective, since it is always better to build in flexibility from the beginning, rather than try to add it on later



UDL as a Technology Initiative

Universal Design for Learning (UDL) was viewed as a technology initiative based on the process of building in accessibility and achievement supports that address the diverse learning needs of all students

Three Principles

Universal Design for Learning calls for ...

- **Multiple means of representation**, to give learners various ways of acquiring information and knowledge
- **Multiple means of expression**, to provide learners alternatives for demonstrating what they know
- **Multiple means of engagement**, to tap into learners' interests, offer appropriate challenges, and increase motivation

Universal Design for Learning

What is...

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A Pivotal Point



Evolution of Achievement

IDEA 1997

Progress in the general education curriculum

Inclusion of ALL students in the Accountability System

A Transformative Initiative

National Center on Accessing the General Curriculum (1999-2004)

CAST,, Boston College, Harvard Law School, Council for Exceptional Children (CEC) and the Parent Advocacy Coalition for Educational Rights (PACER)

UDL as a Curricular Initiative

Recognizes and attempts to eliminate the disabling features in Curricula:

- WHO they can teach
- WHAT they can teach
- HOW they can teach
- Preparing students for their future

Universal



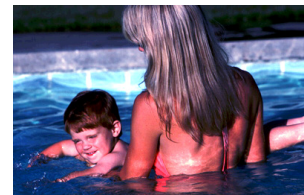
Design



Learning



Models and Mentors
Graduated Scaffolding
Progress monitoring



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Universal Design for Learning

“UDL seeks to decreasing unacceptable challenge while maintaining acceptable challenge”

CAST believes that “barriers to learning are not, in fact, inherent in the capacities of learners, but instead arise in learners’ interactions with inflexible educational goals, materials, methods, and assessments.”

Teaching Every Student in the Digital Age, p. vi

Universal Design for Learning

- ✓ Scientifically valid framework for guiding educational practice
- ✓ Provides flexibility in the ways information is presented, the ways students respond or demonstrate knowledge and skills and the ways students are engaged

Universal Design for Learning

- ✓ Reduces barriers in instruction
- ✓ Provides appropriate accommodations, supports, and challenges
- ✓ Maintains high achievement expectations for all students

Four Curriculum Pillars



Goals

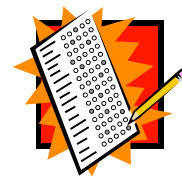


Firm Goals, Flexible Means

- Clearly identified
- Separate from means

Assessment

- Progress Monitoring
- Authentic Assessment
- Accessibility
- Construct validity

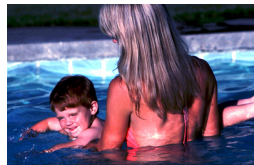


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Methods



Models and Mentors
Graduated Scaffolding



Materials

Emphasis on
Flexible, Transformable Digital Media



BUT... digital media does not equal UDL
and digital does not necessarily equal accessible!

Connecting UDL and AT

- Assistive Technology looks at the specific barriers a student may face in whatever environment they find themselves
- Universal Design looks to make the learning environment as flexible and accommodating as possible
- Both approaches strive to insure the access, participation & progress of students with disabilities

Response to Intervention

- Application of scientific, research-based interventions in general education
- Measurement of a child's response to these interventions
- Use of the RTI data to inform instruction

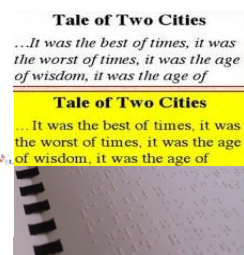
Connecting UDL and RTI

Response to Intervention can be seamless
in UDL Environments

Shouldn't we really be talking about
RESPONSIVE INTERVENTION rather than
Response TO Intervention?

Connecting UDL and AIM

Accessible Instructional
Materials are a key
element of UDL
environments



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Universal Design for Learning

Supports what can be...

*"Where there was once an observer,
let there now be a participant."*

Jerome Bruner



National Center on UDL

<http://www.udlcenter.org/>

...supports the effective implementation of UDL by connecting stakeholders in the field and providing resources and information about...

- What is UDL?
- How can I demonstrate the value of UDL to others?
- Who is implementing UDL and where?
- What research supports the UDL Framework?
- How can I connect to others in the UDL field?

UDL Guidelines

Three primary principles guide UDL—and provide structure for the Guidelines:

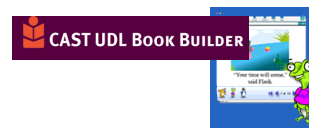
I. Provide Multiple Means of Representation	II. Provide Multiple Means of Action and Expression	III. Provide Multiple Means of Engagement
Perception	Physical action	Recruiting interest
Language and symbols	Expressive skills and fluency	Sustaining effort and persistence
Comprehension	Executive function	Self-regulation

CAST Cool Tools



- Book Builder
- UDL Editions
- Science Writer
- Strategy Tutor
- Lesson Builder UDL
- Curriculum Self-Check

<http://bookbuilder.cast.org/>



- Use Bookbuilder to create, share, publish, and read digital books that engage and support diverse learners according to their individual needs, interests, and skills
- Write text, choose images, add audio clips and glossary terms, and develop supports for coaches. Read completed books online, download them, print them, share them with others

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Taking a Closer Look



<http://udleditions.cast.org>

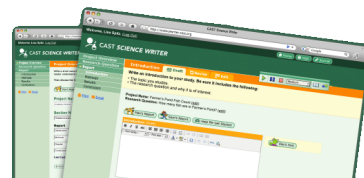
- A collaboration between CAST, Google, and Texthelp
- UDL Editions take advantage of the flexibility of digital media to reach and engage all learners. Leveled supports and the Texthelp Toolbar balance challenge and support for each learner, grades 5-12



Taking a Closer Look



<http://sciencewriter.cast.org/>



- Science Writer supports middle school and high school students in writing lab and class reports
- Contains a report structure, a process for writing, sentence starters, checklist, journal, text-to-speech, and animated helpers

<http://cst.cast.org/cst/auth-login>



- Helps students read, research, collect and understand information better and more efficiently
- Helps teachers provides a way to easily create web-based lessons embedded with research-based, highly effective learning strategy and vocabulary supports

<http://lessonbuilder.cast.org>



- Teaches educators to customize standards-based curriculum to meet individual learning needs
- Developed in cooperation with the Access Center (American Institutes for Research)

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<http://udlselfcheck.cast.org/>



- Helps educators build options and flexibility into each element of the curriculum (goals, methods, materials, and assessments) in order to reach and engage all students

The Teaching Every Student (TES) section of the **CAST** Web site supports educators in learning about and practicing Universal Design for Learning (UDL).

<http://www.cast.org/teachingeverystudent/>

The UDL Elevator Speech

- Is a framework for ensuring access, participation and progress in the general education curriculum
- Assumes and plans for diverse student strengths and needs
- Places emphasis on using digital technology and other strategies and materials to support diverse learners
- Includes assistive technology for some
- Is not limited to high tech environments

Vaclav Havel



*"It is not enough to stare up the steps...
We must step up the stairs"*

Stepping Up the UDL Stairs!

- Know your SEA and LEA major initiatives
- Identify barriers that slow progress
- Consider how UDL features can lower barriers and support achievement of those initiatives
- Demonstrate how UDL features increase efficiency and effectiveness
- ALWAYS equate ROI with student achievement!!



Stepping Up the UDL Stairs!

- Visit the UDL Center Web Site
- Peruse the UDL Guidelines and dig deeply into them
- View examples and try out ideas
- Work through the UDL Online Modules
- Join in UDL conversations with others grappling with the same challenges and opportunities



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Practical Examples & Explanations
Video examples from Classrooms, Teachers and Researchers

3-2-1 Reflection



- Three things you learned in this session
- Two things you will share with others
- One thing you will apply immediately